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ABSTRACT

Korean education is developing in the context of a rapidly changing industrial society. Growth rate in the schools has been phenomenal; in the last three decades an average of four new schools a week have opened. The fundamental principles underlying educational policies in Korea are based on the democratic ideals that educational opportunities should be equally provided for all the people to enable them to develop individual potentiality to a maximum extent, and that educational programs at various levels should be geared to national development. A major goal is to cultivate a strong sense of national identity through social studies, history, language, and the arts. Community education is an important element of the system; innovations have resulted in a master teacher of community education at each school, training programs, adult education, and farm implement repair courses. Innovation at all levels has been implemented through the promotion of school-industry relations, skill learning programs for middle schools, extracurricular activities, and the development of population education. Educational research is being done through institutes and government and university related centers. Problems include large class sizes and a gap in the quality of urban and rural education. Goals are to improve the quality of compulsory elementary education, to extend the years of compulsory education from six to nine, to develop scientific and technical manpower, and to improve effectiveness in education. (KC)

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Ministry of Education

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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EDUCATIONAL DEVELOPMENT IN KOREA 1975-76/1976-77

SO 010 302

Report to
the 36th Session of the
International Conference on Education
Geneva, September 1977

CONTENTS

1. The Developing Context of Korean Education 5

2. An Overview of Korean Education 7

3. New Policy Orientations 9

4. Educational Reforms and Innovations 12

5. Educational Research 17

6. Major Educational Problems 20

7. Prospects for Educational Development 23

I. THE DEVELOPING CONTEXT OF KOREAN EDUCATION

Korea is currently undergoing rapid economic and social development and is speedily being transformed into a modern industrial society. The nation, as many other developing countries, is pursuing within a short span of decades what the Western developed countries have achieved over centuries. The big thrust for accelerated economic growth began in the early 1960's when the Korean economy had still hardly recovered from the extensive devastations wrought by the Korean War. During the past 15 years, the economy has grown at an average annual growth rate of nearly 10%. The impressive economic development of Korea is largely attributable to the successful implementation of a series of five-year development plans.

Through the previous three development plans (1962–1976), virtually all sectors of the economy witnessed drastic expansion. Particularly, the growth of the manufacturing sector has played a leading role in the economic development of the country. Gross National Product rose from approximately $3 billion in 1961 to $25 billion in 1976. GNP per capita increased more than eight times from $83 to $698 during the same period. Exports amounted to $8.1 billion in 1976, whereas they totalled only $30 million 15 years ago.

A rapidly changing society like Korea is apt to experience attendant social problems due to the uneven rates of growth among different social sectors and areas. As investments of limited capital and resources had to be inevitably concentrated on the industrial sector in 1960's, it resulted in unbalanced growth between the industrial and agricultural sectors, consequentially causing a gap between the living standards of urban and rural people. The high waves of rural-to-urban migrants largely caused by the regional gap constrained the effects of governmental policy to improve living conditions in large cities. The rapidity of social change also caused confusion in the value system of society.

To cope with these problems arising from unbalanced development, a community development movement was started with a strong driving force. The Saemaul Movement (New Community Movement), initiated by President Park Chung-hee in 1970, aimed to help villagers create better living conditions by improving their environment, boosting their incomes, and fostering the spirit of diligence, self-reliance, and cooperation. Although the Saemaul Movement, from the beginning, has been financially and admini-

stratively supported by the government, the fundamental nature of the Movement is characterized by a cooperative self-help drive based on the initiative and spontaneity of the people. As a matter of fact, the Saemaul Movement which first started in rural villages has developed into a nationwide movement in which all people, old and young, in rural and urban areas, and on farms and in factories, are actively participating. Korean schools also play an important part in the Movement by providing community education and services to the communities surrounding schools. It is generally recognized that the Saemaul Movement not only has made significant contributions to the improvement of material or physical conditions of communities but has also stimulated attitudinal or behavioral changes in the people and has strengthened national unity and integration.

During the Third Economic Development Plan (1972–76), governmental policies were directed toward achieving balance between growth and stability, placing special emphasis on agricultural and social development. In spite of the energy crisis and the inflation which swept over the world in the early 1970's, the average annual grwoth rate of Korea's economy marked 11.0% during the plan period. The economic policies, backed up by the people's active participation in the community development movement, contributed to the improvement of living standards particularly in rural areas, as the economic and social indicators shown in Table 1 demonstrate.

Table 1. Selected Economic and Social Indicators in 1971 and 1976

Indicators	*Unit*	*1971*	*1976*
GNP per Capita	in US $ at current market prices	266	698
Income of Agricultural Households	in 1,000 Won at 1975 constant market prices	702	943
Number of Employed Persons	in 1,000 persons	10,224	12,640
Rate of Unemployment	percent	4.5	3.9
Infant Mortality Rate	per 1,000 births	50	35
Electrification Rate	percent	33.2	90.7
Rate of Coverage of Drinking Water System	percent	36.4	50.0
Number of Telephones	per 100 persons	1.7	3.4
Rate of Households Having TV sets	percent	10.5	41.0
Length of Express Highway	Km	635	1,142
Number of Automobiles	in 1,000 motor vehicles	144	226
Average Travel Distance per Person	Km	980	1,646

Source: The Government of the Republic of Korea, *Whitepaper on Administration*, 1977, p. 40.

2. AN OVERVIEW OF KOREAN EDUCATION

Korean education today should be seen in the developing context of the society. The fundamental principles underlying educational policies in Korea are based on the democratic ideals that educational opportunities should be equally provided for all the people to enable them to develop individual potentiality to a maximum extent, and that educational programs at various levels should be geared to national development.

One of the most striking trends in Korean education has been the quantitative expansion of the school population (*See Table 2 and 3*). The number of elementary school students has increased more than four times from 1.4 million in 1945 to 5.5 million children in 1976. The enrollment rate at the elementary level already reached almost complete attendance by the early 1960's. In 1945 secondary schools served only 84 thousand students, but now they serve 3.4 million students, comprising approximately 64% of the school age youth. At the level of higher education, the number of students has increased more than forty times from 8 thousand in 1945 to 323 thousand students in 1976. About one out of ten young people is enrolled at an institution of higher education.

Table 2. Number and Growth Rate of Students by Educational Level and Year

	Elementary		*Secondary**		*Higher***	
Year	*Number in 1,000*	*Growth Rate*	*Number in 1,000*	*Growth Rate*	*Number in 1,000*	*Growth Rate*
1945	1,366	100	84	100	8	100
1960	3,621	265	792	949	101	1,292
1965	4,941	362	1,178	1,410	142	1,811
1970	5,749	421	1,909	2,286	194	2,476
1975	5,599	410	3,150	3,772	294	3,756
1976	5,504	403	3,370	4,036	323	4,131

* includes students of middle schools, academic high schools and vocational high schools.
** includes students of colleges and universities, graduate schools, junior teachers' colleges, junior colleges, junior technical colleges and junior vocational colleges.

Sources: For the statistics of 1945–1975, Ministry of Education, *Education in Korea: 1976*
For the statistics of 1976, Ministry of Education, *Statistical Yearbook on Education: 1976*

Table 3. Number of Schools and Teachers by Educational Level and Year

Year	Elementary		Secondary*		Higher**	
	Schools	Teachers	Schools	Teachers	Schools	Teachers
1945	2,834	19,729	165	3,219	19	1,490
1960	4,496	61,749	1,693	22,717	85	3,633
1965	5,125	79,164	1,909	33,175	199	6,966
1970	5,961	101,095	2,497	51,061	191	10,002
1975	6,367	108,126	3,119	82,672	268	13,758
1976	6,405	109,530	3,175	87,142	279	14,124

* includes students of middle schools, academic high schools and vocational high schools.

** includes students of colleges and universities, graduate schools, junior teachers' colleges, junior colleges, junior technical colleges and junior vocational colleges.

Sources: For the statistics of 1945–1975, Ministry of Education, *Education in Korea: 1976*.
For the statistics of 1976, Ministry of Education, *Statistical Yearbook on Education: 1976*.

In order to educate a growing number of students, a large number of new schools have been built. During the past three decades, an average of 4 new schools per week have been established and one institution of higher education has been opened every one and half months somewhere in the southern territory of the Korean peninsula. Given the government's emphasis on expanding educational opportunities for people at all levels of society, some problems have been experienced in terms of classroom over-crowding. Nonetheless, vigorous efforts are being made to reduce the student/teacher ratio while expanding educational opportunities for all.

In the post-Independence period, one of the persistent national concerns was to make the educational system suitable for meeting the social needs for national development by designing school curricula rooted in Korean culture. After Independence in 1948, particularly since the proclamation of the Charter of National Education in 1968, one of the basic principles for educational policy has been to Koreanize the aims and contents of education. This does not mean, however, building education bound to narrow chauvinism, but developing education relevant to the needs of the society. The policy for Koreanization of education represents a just reaction to the following social facts: First, the uncritical importations of the concepts, theories, and practices of Western education in the past made educational programs in Korean schools less relevant to the genuine needs of society and individuals. Secondly, inherited cultural tradition was abruptly discontinued under the dominant influences of foreign cultures and, in consequence, the cultural and national identity of young people was severely confused. Thirdly, national integration was vitally needed for mobilizing the people's energy for the modernization of society on the one hand and meeting the incessant threats by the northern part of divided Korea on the other hand.

3. NEW POLICY ORIENTATIONS

Reorientation of Policy Toward Relevance of Education

A national concern overriding all educational policies implemented during the years 1975–76 was to cultivate a strong sense of national identity among Korean people. In order to provide students with knowledge, skills, and values which are not only demanded by the developing nation, but also compatible with the cultural traditions of society, curriculum and textbooks in current use were extensively and intensively scrutinized and revised so as to include contents relevants to the society. Special attention was paid during the period to such subject-matter as social studies, Korean history, moral education (or national ethics) and Korean language. A variety of instructional materials were developed to teach students the Korean democratic system and its merits over other types of political systems.

To provide students with vivid and direct experiences to facilitate deep understanding of the tradition of Korean culture and the current national needs and problems, extracurricular activities for students were organized for visists to historical sites and industrial complexes, and service for the people in remote rural areas. School curriculum was also enriched with the contents of traditional arts and music to develop students' appreciation of Korean culture. Teachers are a key factor for the Koreanization of education, so to speak. Thus, the programs for teacher education were modified toward that direction. During the period 1975–76, tens of thousands of school teachers participated in meetings and in-service training programs to prepare themselves for education relevant to the society.

Institutionalization of Community Education

The idea of community education has long formed a part of our culture. Until recent times, though, community education was only sporadically conducted by schools throughout the country. However, in 1972 the Ministry of Education (MOE) adopted a policy to support community education in integration with the nationwide Saemaul Movement. Since that time, almost every Korean school has made effort to provide educational services to all the community residents.

During the past two years, educational policy has been directed toward

the institutionalization and stabilization of community education in the school systems. Some highlights of community education policy have been as follows:

(1) Individual schools or school districts have been encouraged to localize their own curriculum for students through the development of educational contents and materials pertaining to students' lives in the community.

(2) The position of "master teacher for community education" (Saemaul Teacher) has been formally established in each school so that he can assume the responsibility of coordinating of community education activities at the school.

(3) One-week teacher training programs conducted to train about 15,000 teachers in Saemaul education during the period of 1975–76.

(4) 9,300 elementary and secondary schools opened adult classes (Saemaul Classes) and 158 agricultural high schools have established all-year round adult schools (Saemaul Schools) to teach adults skills and knowledge relating to agriculture, family life, and health.

(5) Farming implements repaire centers were established at all of the agricultural high schools to teach farmers as well as students how to operate and repaire various types of new agricultural tools or machines.

Improvement and Expansion of Vocational and Technical Education

As the nation's economy is rapidly industrialized, there is a growing demand for skilled manpower, particularly for heavy and chemical industries to which is given economic policy priority. The demand for craftsmen far exceeds the supply of them and highqualified workers are badly needed as industrial technology advances. An acute shortage of industrial manpower is foreseen throughout the period of the Fourth Economic Development Plan (1977–81). Thus, the government made great effort to expand technical education programs during the years 1975–76. The number of students at various levels of technical education has drastically increased: approximately 8,800 students more at technical high schools; 8,700 students at junior technical colleges; and 1,200 students at 4-year engineering colleges. For maximum utilization of the facilities, a greater number of technical high schools were encouraged to open evening classes to train currently unemployed and newly employed workers in contract with industries.

Special financial and administrative support from the government was provided to engineering colleges to promote engineering education in specialized areas to meet the demand for particular types of manpower in local industries. This governmental policy has remarkably contributed to the reduction of a wide gap in quality of education between municipal and local universities and to the cooperation between educational institutions and local industries.

Besides formal education, non-formal education for training technicians was also greatly expanded during the past two years. At present, 118 public and private vocational training institutes annually produce about 30 thousand craftsmen and 443 in-plant training centers established by industries supply about 40 thousand craftsmen to those industries.

In order to improve the quality of technical and engineering personnel, the National Technical Qualification Law was enacted in 1975. From that year, it has been required for all the graduates of technical schools and colleges to take a national examination to obtain a certificate for a certain degree of competency.

Improvement of Quality of Education

As already mentioned, the quality of education has sometimes been constrained by the quantitative expansion of education in Korea. An emphasis in educational policy during the past two years was placed on the qualitative improvement of education. First, school curriculum and instructional materials were partially or totally revised to reflect the social, political, economic, and technological conditions of the changing society. During the period, the most drastic curriculum change was made to improve vocational education. According to the revised curriculum more than 50 textbooks for vocational high schools were developed. The Ministry of Education also developed and distributed 34 guidebooks and sourcebooks to help elementary school teachers.

The teacher is one of the critical elements in the improvement of educational quality. To prepare teachers to perform their changing roles in the society and to keep abreast of the advancement of knowledge, massive in-service teacher training programs were provided to 42,000 teachers in 1975 and 43,000 teachers in 1976 at the various levels of education. Adequate economic and social rewards for teachers are being ensured not only to enhance their enthusiasm and morale, but also to recruit and maintain capable teachers. In 1975 the government regulations concerning salaries and allowances for teachers were amended to raise the salary level of all teachers and to provide special allowances to teachers in rural and remote areas, and islands.

4. EDUCATIONAL REFORMS AND INNOVATIONS

Education should be continuously self-renewed to adapt to its rapidly changing environment. The educational system itself should be developed in order to make contributions to the development of society. In the past two years, continuous efforts have been made to introduce reforms and innovations to Korean education. The fundamental direction of the efforts has been toward the improvement of quality and relevance of education.

Implementation of the Elementary and Middle School Development Project

The Elementary and Middle School Development Project (E-M Project) is presently being undertaken by the Korean Educational Development Institute to bring about changes in all facets of education in order to improve the effectiveness and efficiency of education. The major tasks of the comprehensive innovation project are (1) studies on educational goals, (2) curriculum specification, (3) development of teaching and learning materials, (4) development of instructional and school management systems, (5) development and application of TV and radio programs to instructional process, (6) development of teacher training programs, (7) policy studies and diffusion activities and (8) evaluation of the developed educational systems.

The E-M Project started in 1972, but during the years 1975–76 the major progress was made. The first accomplishment of the E-M Project was the development of a new educational system which comprises instructional and school management systems. The instructional system was designed to provide individualized instruction through the application of multiple instructional materials and media. Under the new system, instruction follows the cycle of planning-diagnosis-teaching(and learning)-evaluation. The major feature of the new school management system is the adoption of management by objectives, which, in turn, calls for a shift from the closed-classroom organization to grade-centered organization. It provides for a flexible organization of learning group and team teaching. The new educational system for primary school has undergone four small-scale tryouts and two comprehensive tryouts at 200 schools—one or two in each county. The number of pilot schools is 20, and the remaining are cooperating schools. These schools serve as a diffusion center of the innovative program.

The Institute completed an educational broadcasting station equipped with modern facilities for production of radio and television programs. In 1976, 730 ITV programs and 3,700 instructional radio programs for regular schools, and 1,800 radio programs for the air and correspondence high schools were produced. ITV programs will begin to be broadcasted throughout the country in 1977 when the transmitting system now under construction is completed. But for the time being, radio programs are currently being broadcasted through the channels of existing public and commercial broadcasting stations.

Reforms of Higher Education

The Ministry of Education has formed the Committee for Higher Education under the Ministry's Educational Policy Council to identify important problems and plan the future development of Korean higher education. On the basis of discussions through planning seminars, the Committee submitted two basic documents which made recommendations to MOE for early introduction of reforms and development of plans for solving problems faced by higher education. The recommendations were received with favor by MOE staff, and it immediately developed the basic directions for the reform of higher education.

The project content was developed to include the following:

1) Promoting the development of cooperative systems among regional institutions of higher education and the regional society.
2) Initial college admission of students by broad fields rather than narrow departments and selection of majors upon the completion of one or two year liberal education at college.
3) Introducing a system of double majors or major-minor combinations and reduction of credit requirements for graduation from 160 to 140.
4) Promoting accelerated graduation system based on individual competence.
5) Operation of the multi-semester system by introducing summer school program.

These innovations were experimented with at carefully selected pilot institutions of higher education. By the end of 1974, 20 institutions joined the higher education reform project. Since the results of the experimental reform projects were favorably evaluated, MOE decided to expand the experimental institutions in number and diffuse additional innovations in the content and methods of education which would directly contribute to the qualitative improvement of higher education. Thus, in the years 1975–76, the following three innovative attempts were made: (1) the development of model curriculum in selected areas; (2) the requirements of thesis and comprehensive examination for a bachelor's degree; and (3) the improvement of graduate

education.

Among them, the model curriculum development deserves to be elaborated a little here.

In many cases, Korean universities and colleges in the past offered outmoded curriculum in various disciplines to the students. There was growing cirticism that college curriculum lack relevance to the needs of changing society; that college programs were often organized in a standardized and fixed form without catering to the individual needs of students and the social needs of communities; and that there were no sufficient interrelationship but sometimes overlaps among courses and among disciplines.

In 1974, MOE began to support the project for the development of a model curriculum in some selected academic fields under the comprehensive reform program at pilot institutions of higher education. In the past few years, model curricula were developed in such fields as Korean literature, economics, sociology, chemical engineering, chemistry, industrial education, mechanical engineering, electronic engineering, atomic engineering, and the program of liberal education. Universities and colleges are encouraged to refer to the model curricula for their curriculum revision. But they are not forced to adopt them. MOE continues to support the model curriculum project and to annually expand the scope of academic fields to be included in the project. The model curriculum project is one of the most important innovations for the qualitative improvement of higher education in Korea.

Promotion of School-Industry Cooperation

There is an increasing need for cooperation between schools and industries in developing manpower required for an industrializing society. The school can no longer be the only institution to assume the enormous responsibility for manpower development. The Industrial Education Promotion Law, revised in February 1973, clearly stipulated that industries should cooperate with schools for training the manpower which they need.

During 1975 and 1976, the following new steps toward school-industry cooperation were taken:

1) Encouraging industries to establish attached middle and high schools for education of workers and their children.
2) Raising funds from industries to provide financial supports for research and education not only in industrial areas but also in other general areas.
3) Opening evening classes for working youth at existing secondary schools in the vicinity of industrial complexes or areas.
4) Provision of special programs by existing technical high schools for training overseas construction workers.
5) Utilization of industrial facilities for practical training of students attending vocational schools at all levels.
6) Requirement for large industries to establish in-plant technical

training centers for their employees.

The in-plant training centers represent one of the most significant innovations designed to promote education-industry cooperation and non-formal education. This needs more elaboration. In 1975, the Special Law on Vocational Training was enacted to require every industry employing more than 500 workers to provide on-the-job training to its employees. By the end of 1976, industries established 443 training centers to annually train 41,000 skilled workers in the 16 major areas of skills at their expenses. Along with other existing public and private vocational training institutes, industries are required to take a greater part in developing skilled manpower. As it is anticipated that the demand for skilled labor far exceeds the supply by formal vocational schools in the coming several years, the government made a decision in 1977 to require all the industries employing more than 300 workers to establish their own technical training centers so that the number of such training centers will total 350 by the end of 1977.

Development of Skill Learning Programs for Middle School Students

With the rapid development of industry, skilled manpower has been in growing demand. This has created the need to strengthen vocational education in the curriculum at the middle school level.

The major objectives of industrial arts education are:

1) to nurture respect in middle school students for skilled work,
2) to equip them with basic skills which form the foundation for growing into technicians and professionals in specific areas, and
3) to increase the number of skilled people necessary for an industrialized society.

The areas covered by industrial arts education for middle school students are agriculture, industry, commerce, fishery and home-economics. All middle schools are required to choose one of these areas which meets the special needs of regional community.

To respond to emerging needs, the curricula of middle and high schools underwent a large scale revision in 1969 to offer skill learning programs applicable to all students, both boys and girls, as a required course in addition to the elective courses. The skill learning program was further refined in 1973, and through this process, the objectives and contents were identified with great concern devoted to improve its quality. The objectives were further specified by grade and the contents were developed to include wood work, farming, metal work, machinery work, electricity and electronics. In this connection, home-economics was strengthened for female students with the identification of new objectives and content.

As an innovative movement, the Korean Educational Development Institute has sought to upgrade the quality of industrial arts education by

developing a new instructional model entitled "Individually Assessed Skill Learning Model." Its effectiveness has been validated through field tryouts in actual classroom situations. Together with this, researches was carried out for the standardization of shop facilities and equipments. Two pilot schools are now under operation where the new skill learning system is being demonostrated. This innovative system is scheduled to be implemented at 22 schools in 1978.

Promotion of Students' Extracurricular Activities

Extracurricular artivities of high schools and colleges were also considerably promoted in recent years. First, three student centers with lecture halls, athletic facilities, camp sites, and boarding facilities were established and operated by the government. The Unesco Youth Center in Korea was established by the Korean National Commission for Unesco. MOE recently decided to build such a student center in each province and municipality. Participating in the centers' extracurricular program, students could develop their intellectual, aesthetic, and social interests.

Secondly, for college and high school students in Korea, participation in social service activities for rural population during summer and winter vacations has been a long-esteemed tradition for the past half century. MOE has augmented its support for the voluntary social service activities of students. In 1975, approximately 1.8 million high school students and 50 thousand college students volunteered for social services in rural areas and, in 1976, 1.5 million high school students and 40 thousand college students participated in the social service drive.

Development of Population Education Programs for Students and Adults

In accordance with the national population policy, the Ministry of Education has carried out the population education project for three years from 1974 to 1977, with the financial support of UNFPA. Under the project, (1) curriculum and instructional materials were developed for use at elementary and secondary schools; (2) college programs for population education were experimented at four institutions of higher education; (3) adult programs and materials of various types, such as slides, tapes, charts, leaflets and texphams were also developed for use by adult classes; (4) research on population behaviour and curriculum was conducted to provide the knowledge base for population education; and (5) seminars and conferences were held for textbook writers, supervisors, school principals, teacher educators, etc., to prepare them for training classroom teachers in population education. This project has already exerted significant influences upon teachers' instruction at school. But the population education programs and materials developed through the project will be actually utilized in the coming years.

5. EDUCATIONAL RESEARCH

There are three major organization loci of educational research in Korea: (1) independent educational research institutes; (2) university-affiliated research centers; and (3) government-attached research centers. The two major independent research organizations are the Korean Educational Development Institute (KEDI) and the Korean Institute for Research in the Behavioral Sciences (KIRBS). The KEDI, an autonomous research organization established in 1972 by MOE, undertakes comprehensive educational research and development programs, to develop improved curriculum, effective instructional processes and materials, and the efficient school management system, under the Elementary and Middle School Development Project as mentioned earlier. The institute is also actively involved in policy research to provide a solid knowledge base for educational planning and policy-making activities of the MOE. The KIRBS, founded in 1968, is a private institute conducting basic and applied research on a rather wide range of themes relating to not only educational but also social problems. For educational research, the institute is more specialized in the areas of learning and instruction, early childhood education and psychological testing.

Some of the titles of research reports published by these independent research organizations are illustrated as follows:

Selected research reports published by KEDI in 1975–76

(1) Study on the Curriculum Development of Population Education
(2) Report on the Third Tryout of New Instructional System
(3) Effect of ITV on Learning and Attitude
(4) Survey on School Management System
(5) Saemaul Education for Rural Development
(6) Survey on Vocational and Home Economic Programs in Middle Schools
(7) Development of Skill Learning Curriculum in Middle Schools
(8) Determinants of Recurrent Expenditures and Economic Scale in the Operation of Private Secondary Schools
(9) Study on Students' Attitudes toward the National Referents
(10) Policy Study on the Problem of Repeating Applicants for College Enterance Examination

Selected research reports published by KIRBS in 1975–76

(1) An Experimental Study on the Development of Intellectual Abilities of Culturally Deprived Children
(2) The Effects of Educational Toys upon the Intellectual Development of Mentally Retarded Children
(3) Kindergarten Education in Korea: Its Development and Problems
(4) A Study on the Imporvement of Basic Learning Capabilities: I and II
(5) A Pilot Study of the Development of Adults' Functional Reading Competence
(6) An Experimental Study for the Improvement of Middle School Students' Reading Power and Speed
(7) Mastery Learning Project in the Middle School
(8) A Longitudinal Study of Korean Children: I and II
(9) Curriculum Development on Population Education for Adults: I, II, and III
(10) The School Culture in Korea

Six higher educational institutions have set up educational research institutes. The faculty members of education departments participate in various contract research projects usually supported by external organizations, such as governmental agencies, foundations and professional associations. A main emphasis in the educational research centers of universities is placed on fundamental research with an experimental nature. In recent years, the university-affiliated educational research centers have focused on the studies of higher education, population education and teaching-learning process. In some cases, student guidance centers of universities are active in conducting research related to guidance and counseling.

The Ministry of Education and each of 11 provincial and municipal boards of education have a research center: The National Institute of Education (NIE) is a government-attached research center directly operated by MOE. This national institute and local centers are principally concerned with the collection of data needed for formulating educational policies of the central and local educational authorities and production and dissemination of educational materials for the school systems.

Besides these research organizations, individual college professors and teachers carry out research. Individual professors and groups have recently become more active than in the past in educational research, as research grants of MOE and other foundations have considerably increased. Research activities at primary and secondary schools are also stimulated by the encouragement of educational authorities to operate experimental and demonstration schools. School teachers are predominantly concerned with study of teaching methods of various subject-matters. The Korean Federation of Education Associations annually holds the National Meeting on

Educational Research to provide opportunities to teachers for presentation of their research results.

In the period 1975–76, the major trends in educational research in Korea may be characterized by the promotion of (1) policy-oriented research, (2) problem-oriented research, and (3) development-related research.

Some important policy-oriented researches were conducted to provide a knowledge base for drawing up educational policies to reform higher ecucation and to cope with the repeaters problem. Studies of higher education were carried out to find ways for improving college curriculum and organization and introducing innovations in teacher education, and to evaluate the experimental reforms of pilot instutitions. The results of those studies were fed back into the formulation of policies for higher education. Another important study was conducted to discover policy alternatives to solve the problem of increasing repeaters for college enterance examination. The repeaters study was of particular significance in the sense that the research and policy-making processes were well integrated and coordinated.

Secondly, in the period 1975–76, problem-oriented studies were emphasized to develop educational programs for dealing with social problems facing Korea today. Population education has recently been a focus of educational research. Research was carried out by research organizations and individual researchers to study the development of population-related concepts and norms of students and the specification of objectives and the selection and organization of contents for population education. The redirection of educational goals to overcome confusion of national identity in a changing society called for some philosophical, historical, and social scientific research in the past few years.

Thirdly, development-related research was significantly promoted particularly in association with on-going educational development projects. To provide a sound basis for development activities, numerous studies were carried out by educational research and development institutes, such as KEDI and KIRBS. Two types of research are conducted in relation to development projects. One type of development-related research to be conducted prior to development activities aims to obtain some baseline data needed for the development project. The other type is evaluative research to test the effectiveness of newly developed instructional or organizational systems. During the period 1975–76, such development-related research was conducted by research organization involved in curriculum development programs.

6. MAJOR EDUCATIONAL PROBLEMS

Despite the enormous progress Korean education has witnessed in the past decades—in terms of expansion of educational opportunities and in the overall quality of education—problems do remain. The Government of the Republic of Korea is earnestly striving to overcome the remaining difficulties and is confident that it can do so. Some of the major problem areas in which efforts are now being channeled are as follows:

Large Class Size of Elementary and Secondary Schools

Classes in Korean schools are generally very large. In 1976, the average numbers of students per class were 55 and 62 students at the elementary and secondary levels, respectively. There has been no apparent decline of class size in the last few decades as shown in Table 4. But there is a tendency in recent year toward slightly declining elementary school class size and slightly increasing secondary school class size. This trend is largely attributable to the fact that the young people born during the post-war baby boom have moved up from elementary to secondary schools. However, the government plans to gradually reduce class size of elementary schools to

Table 4. Number of Students per Class and Teacher

Year	*Elementary School*		*Secondary School*	
	Per Class	*Per Teacher*	*Per Class*	*Per Teacher*
1945	54.0	69.2	52.9	25.9
1952	61.0	66.5	52.3	39.8
1956	55.5	55.5	56.2	37.4
1960	57.4	58.6	54.3	34.9
1965	65.4	52.1	52.7	35.5
1970	62.1	56.9	60.8	37.4
1975	56.7	51.8	62.2	38.1
1976	55.0	50.2	62.2	38.7
1981	51.0	—	58.5–59.9	—

Source: For 1945–70, Ministry of Education, *Education in Korea: 1974.*
For 1975–76, Ministry of Education, *Statistical Yearbook of Education: 1976.*
For 1981, Economic Planning Board, *The Fourth 5-Year Economic Development Plan: 1977–1981.*

51 pupils and that of secondary schools to 59-60 students by the year 1961.

In spite of strenuous efforts of the government for construction of new school facilities, schools were far short of classrooms especially during the period from that Korean War of 1950-53 to the middle of 1960's. During that period, the elementary schools were utilized in double-shift or in some cases three-shift operations. But now, only 2% of elementary schools are operated in double-shift. However, the reduction of class size of schools particularly in urban areas is recognized by the government as one of the pressing educational problems in Korea.

Regional Gap in Quality of Education Between Urban and Rural Schools

In terms of the geographical accessibility to schools there is no significant disadvantage for rural children and youth. As Table 5 shows, rural areas have more schools than cities in comparison with the population distribution, although institutions of high education are concentrated in cities. However, nationwide studies have repeatedly indicated that school achievement of rural students is significantly lower than that of their urban counterparts. The relatively lower achievement of rural students might be caused by such multiple factors as concentration of young inexperienced teachers in rural areas, poorer educational facilities and lower educational expenses per student of rural schools, urban-oriented curriculum taught to rural students, cultural and economic factors holding the lower levels of educational aspiration of rural students and their parents, etc. In order to diminish the regional gap in quality of education between urban and rural schools, the government has taken various actions, such as adoption of the teacher rotation system,

Table 5. Geographical Distribution of Schools and Population: 1975

Educational Level	*Large Cities**	*Middle and Small Cities***	*Rural Areas*	*Total*
Primary School	6.6	7.7	85.6	100.0
	(421)	(493)	(5,453)	(6,367)
Middle School	14.9	14.1	71.0	100.0
	(294)	(277)	(1,396)	(1,967)
High School	21.2	25.7	53.1	100.0
	(244)	(296)	(612)	(1,152)
University & College	48.0	45.1	6.9	100.0
	(98)	(92)	(14)	(204)
Population	30.7	17.7	51.6	100.0

* Large cities include cities with the population of more than 1 million: Seoul, Busan and Daegu.

** Middle and small cities include cities with the population over than 50 thousand but less than 1 million.

Note: The figure in a parenthesis indicates the number of schools.

provision of special allowances to rural teachers, distribution of audio-visual equipments and materials, and allocation of more budget for free textbooks and educational costs for poor rural students. Currently policy priority is also given to the development of local universities and colleges.

Increasing Number of Repeating Applicants for College Entrance Examination

In recent years, the increasing number of repeating applicants for college entrance examination has drawn public attention. The repeaters are those who aspire to higher education but fail to pass the college entrance examination and prepare themselves for the next one after graduation from high schools. These repeaters have sometimes caused social problems. In many cases, their parents have to bear heavy psychological and economic burden to support their children's prolonged preparatory study for college.

As the number of high school graduates has drastically increased in recent years, the competition for entering colleges has become more serious than before. In 1970 the seats at colleges were open for 32% of high school graduates while colleges could admit only 20% in 1976, although the absolute number of students admitted to colleges has annually increased at a rate of 4.8% during the same period.

To cope with the repeaters problem, the Korean Educational Development Institute was commissioned to conduct a policy research. The Institute has proposed the following policies to deal with the problem: (1) to expand the enrollment of 4-year and 2-year junior colleges in such a way to meet the increasing social demand for highly-qualified manpower and to maixmally utilize the existing facilities for additional students; (2) to provide effective career education for secondary students to help them wisely choose their career and to establish vocational classes at the third grade level of general high schools; (3) to expand non-formal vocational training centers, public and private, to train more high school graduates to equip them with vocational skills and knowledge; and (4) to encourage employing organizations to provide more jobs for high school graduates and to improve their wage level and other working conditions to attract more high school graduates. The proposed policy alternatives are now under consideration by the government.

7. PROSPECTS FOR EDUCATIONAL DEVELOPMENT

The prospective picture for Korean education in the next 5 years is clearly drawn in the Fourth Five-Year Economic Development Plan. The development plan presents the objectives, tasks, and means of policy for educational development during the five years from 1977 to 1981.

Improvement of Compulsory Elementary Education

The crowdedness of classrooms will be considerably alleviated by 1981 through a decrease in the number of students per class *(Refer to Table 7)*. Currently parents of school children pay for low-priced textbooks and some nominal PTA fees for covering a small part of operational costs of schools. In order to make elementary education completely free, the public expenditure will cover parents' expenses for textbooks and PTA fees. Policy priority will be given to the development of special education and pre-primary education. For education of physcially and mentally handicapped children, educational facilities will be expanded and curriculum and instructional materials will be developed under the Law on Spcial Education Development to be enacted. During the period 1977-81, about 70 experimental kindergarten attached to public elementary schools will be established to explore ways and means to promote pre-primary education.

Preparation for Extension of Compulsory Education through the Middle School Level

It is an official goal to extend current 6-year compulsory education to 9-year education covering the primary and middle school levels in early 1980's. During the period of the Fourth Economic Development Plan, public efforts will be directed to the foundation work for the extension of compulsory education. It is projected that the percent of elementary school graduates entering middle schools will increase from 76.9% in 1975 to 90.1% in 1981 *(See Table 8)*. More public middle schools will be established to raise the rate of public vs. private schools. Until 1981, the government will gradually increase public subsidies to cover about 50% of personnel costs of private middle schools. In the meantime, a policy study committee will be organized to explore financial, legal, organizational means for the extension of compulsory education.

Development of Scientific and Technical Manpower

Vocational schools will be greatly expanded to supply 42% of technical manpower demanded by the growing economy. During 1977–1981, 28 vocational high schools and 17 junior technical colleges will be newly established to train technical workers particularly needed by heavy and chemical industries *(See Table 9)*.

To staff an increasing number of vocational schools with qualified teachers, pre-and in-service vocational teacher education will be strengthened, and a strong incentive system will be devised for prospective and currently employed teachers of vocational schools by providing scholarship grants and boarding accommodation, exempting them from military services, paying special allowances, etc.

The curriculum for middle schools will be revised to have students experienced in basic technical skills. As mentioned earlier, more general high school will establish vocational classes for students who choose not to go to colleges.

Improvement of Effectiveness of Education

The quantitative growth of education without qualitative improvement means futility, while the qualitative improvement without quantitative growth leads to inequality. One of the most important tasks for Korean education in the future will be to continue to promote and strengthen the quality of education available to all. In the coming years, Korean education will take a great step forward to that direction. Many creative reforms and innovations which are now underway will bring about fruitful impacts on Korean education in the near future. For instance, individualized instructional system, educational radio and television broadcasting, differential staffing in school, enriched textbooks and sourcebooks, experimental apparatus for science education, improved model for teacher education, all these innovations are the seeds for high-quality education, which our young generation shall reap in the future.

Table 7. Projected Changes in Elementary Education 1975–1981

Major Indicators	*1975*	*1981*
Number of Students	5,599,074	5,357,369
Number of Classes	98,864	104,897
Students/Class	56.7	51.0
Percent of Students Provided with Free Textbooks	67.1	100
Percent of Students Paying PTA Fees	56.3	0

Source: Economic Planning Board, *The Fourth Economic Development Plan: 1977–1981*, 1976.

Table 8. Projected Changes in Middle School Education: 1975–1981

Major Indicators	*1975*	*1981*
Percent of Primary Graduates Entering Middle Schools	76.9	90.1
Number of Students	2,026,823	2,300,814
Number of Classes	31,441	38,672
Students/Class	64.5	59.5
Proportion of Public Expenditure for Personnel Costs of Private Middle Schools	10.1	50.0
Ratio of Public vs. Private Middle Schools	59.9:40.1	67.7:32.3

Source: Economic Planning Board, *The Fourth Economic Development Plan: 1977–1981*, 1976.

Table 9. Projected Changes in High School Education: 1975–1981

Major Indicators	*1975*	*1981*
Percent of Middle School Graduates Entering High Schools	75.7	79.5
Number of Students:	1,123,017	1,557,738
of General High Schools	648,149	916,342
of Vocational High Schools	474,868	641,396
Number of Classes:	19,167	27,361
of General High Schools	10,840	16,053
of Vocational High Schools	8,327	11,308
Proportion of Vocational High Schools Students/Class:	40.8	42.0
of General High Schools	60.2	59.9
of Vocational High Schools	58.2	58.5

Source: Economic Planning Board, *The Fourth Economic Development Plan: 1977–1981*, 1976.